

**For Astrophysics and other ultraviolet radiation detection
28mm(1-1/8 Inch) diameter, 11-stage, Cs-Te photocathode
Solar blind response(160nm to 320nm), Head-on type**

GENERAL

| Parameter | | Description / Value | Unit |
|--------------------------------|------------------------|---------------------|---------|
| Spectral Response | | 160 to 320 | nm |
| Wavelength of Maximum Response | | 240 | nm |
| Photocathode | Material | Cs-Te | - |
| | Minimum Effective Area | 25 | mm dia. |
| Window Material | | Synthetic silica | - |
| Dynode | Structure | Box & Line | - |
| | Number of Stages | 11 | - |
| Suitable Socket | | E678-14C (supplied) | - |

MAXIMUM RATINGS (Absolute Maximum Values)

| Parameter | | Value | Unit |
|-----------------------|-------------------------------|-------|------|
| Supply Voltage | Between Anode and Cathode | 1500 | Vdc |
| | Between Anode and Last Dynode | 250 | Vdc |
| Average Anode Current | | 0.01 | mA |

CHARACTERISTICS (at 25°C)

| Parameter | | Min. | Typ. | Max. | Unit |
|---|-----------------------|------|-------------------|------|------|
| Cathode Sensitivity | Radiant at 254nm | - | 28 | - | mA/W |
| Anode Sensitivity | Radiant at 254nm | - | 1.4×10^4 | - | A/W |
| Gain | | - | 5.0×10^5 | - | - |
| Anode Dark Current (after 30min. storage in darkness) | | - | 0.3 | 1.0 | nA |
| Time Response | Anode Pulse Rise Time | - | 4.0 | - | ns |
| | Electron Transit Time | - | 30 | - | ns |

NOTE: Anode characteristics are measured with the voltage distribution ratio shown below.

VOLTAGE DISTRIBUTION RATIO AND SUPPLY VOLTAGE

| Electrodes | K | Dy1 | Dy2 | Dy3 | Dy4 | Dy5 | Dy6 | Dy7 | Dy8 | Dy9 | Dy10 | Dy11 | P |
|------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|---|
| Ratio | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

Supply Voltage : 1000Vdc, K : Cathode, Dy : Dynode, P : Anode

PHOTOMULTIPLIER TUBE R6834

Figure 1: Typical Spectral Response

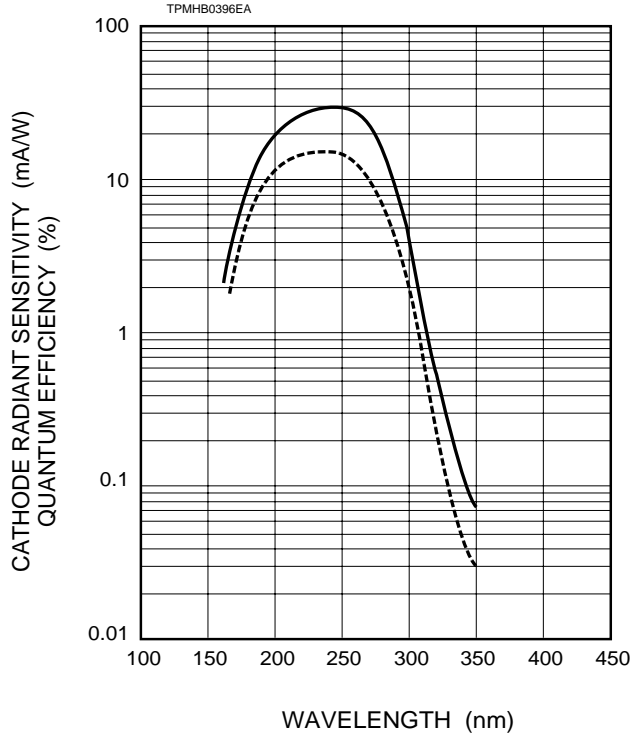


Figure 2: Typical Gain

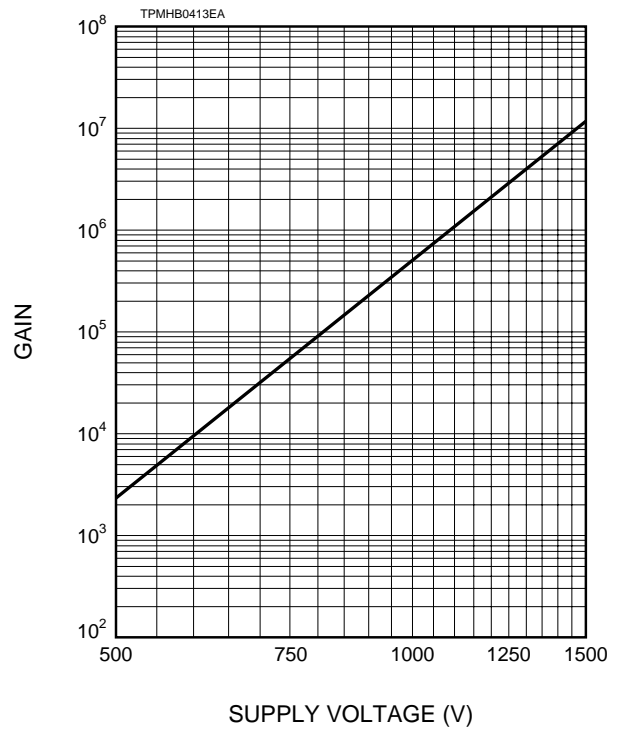
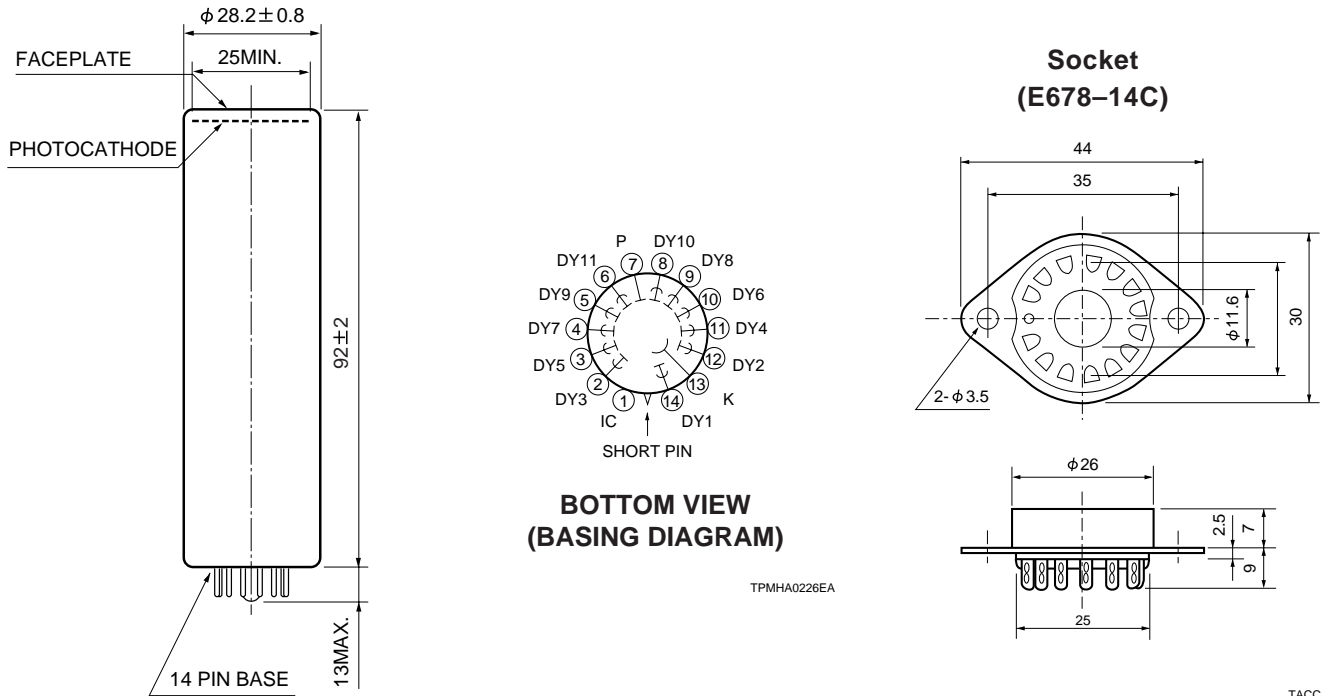


Figure 3: Dimensional Outline and Basing Diagram (Unit : mm)



HAMAMATSU

HAMAMATSU PHOTONICS K.K., Electron Tube Center

314-5, Shimokanzo, Toyooka-village, Iwata-gun, Shizuoka-ken, 438-0193, Japan, Telephone: (81)539/62-5248, Fax: (81)539/62-2205

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, Bridgewater, N.J. 08807-0910, U.S.A., Telephone: (1)908-231-0960, Fax: (1)908-231-1218

Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49)8152-375-0, Fax: (49)8152-2658

France: Hamamatsu Photonics France S.A.R.L.: 8, Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: (33)1 69 53 71 00, Fax: (33)1 69 53 71 10

United Kingdom: Hamamatsu Photonics UK Limited: Lough Point, 2 Gladbeck Way, Windmill Hill, Enfield, Middlesex EN2 7JA, United Kingdom, Telephone: (44)181-367-3560, Fax: (44)181-367-6384

North Europe: Hamamatsu Photonics Norden AB: Färögatan 7, S-164-40 Kista Sweden, Telephone: (46)8-703-29-50, Fax: (46)8-750-58-95

Italy: Hamamatsu Photonics Italia: S.R.L.: Via Della Moia, 1/E, 20020 Arese, (Milano), Italy, Telephone: (39)2-935 81 733, Fax: (39)2-935 81 741

TPMH1158E01
JUN. 1997